NPTEL Video Course - Mathematics - NOC:Measure Theory

Subject Co-ordinator - Prof. Inder K Rana

Co-ordinating Institute - IIT - Bombay

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 1 - (1A) Introduction, Extended Real Numbers
Lecture 2 - (1B) Introduction, Extended Real Numbers
Lecture 3 - (2A) Algebra and Sigma Algebra of Subsets of a Set
Lecture 4 - (2B) Algebra and Sigma Algebra of Subsets of a Set
Lecture 5 - (3A) Sigma Algebra generated by a Class
Lecture 6 - (3B) Sigma Algebra generated by a Class
Lecture 7 - (4A) Monotone Class
Lecture 8 - (4B) Monotone Class
Lecture 9 - (5A) Set Functions
Lecture 10 - (5B) Set Functions
Lecture 11 - (6A) The Length Function and its Properties
Lecture 12 - (6B) The Length Function and its Properties
Lecture 13 - (7A) Countably Additive Set Functions on Intervals
Lecture 14 - (7B) Countably Additive Set Functions on Intervals
Lecture 15 - (8A) Uniqueness Problem for Measure
Lecture 16 - (8B) Uniqueness Problem for Measure
Lecture 17 - (9A) Extension of Measure
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Lecture 20 - (10B) Outer Measure and its Properties
Lecture 21 - (11A) Measurable Sets
Lecture 22 - (11B) Measurable Sets
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Lecture 24 - (12B) Lebesgue Measure and its Properties
Lecture 25 - (13A) Characterization of Lebesgue Measurable Sets
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Lecture 27 - (14A) Measurable Functions
Lecture 28 - (14B) Measurable Functions
Lecture 29 - (15A) Properties of Measurable Functions

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Lecture 30 - (15B) Properties of Measurable Functions
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Lecture 32 - (16B) Measurable Functions on Measure Spaces
Lecture 33 - (17A) Integral of Nonnegative Simple Measurable Functions
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Lecture 36 - (18B) Properties of Nonnegative Simple Measurable Functions
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